



Introduction to DARPA

Dr. Tony Tether
Director

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DARPA Organization



Director, Tony Tether

Information Exploitation

Stephen Welby
Robert Tenney

Sensors
Exploitation Systems
Command & Control

Tactical Technology

Art Morrish
Gary Graham

Air/Space/Land Platforms
Unmanned Systems
Space Operations
Laser Systems
Future Combat Systems
Planning / Logistics

Special Projects

Amy Alving
Joe Guerici

Chem/Bio Def Systems
Counter Underground Facilities
Space
Sensors/Structures
Navigation/Sensors/Signal Processing

Advanced Technology

Dave Honey
Larry Stotts

Assured C3ISR
Maritime
Early Entry/Special Forces

Information Awareness

John Poindexter
Robert Popp

Asymmetric Threat
Prediction
Behavior Modeling

Defense Sciences

Michael Goldblatt
Steven Wax

Bio Warfare
Defense Technologies
Biology
Materials & Devices
Mathematics

Information Processing Technology

Ron Brachman
Zach Lemnios

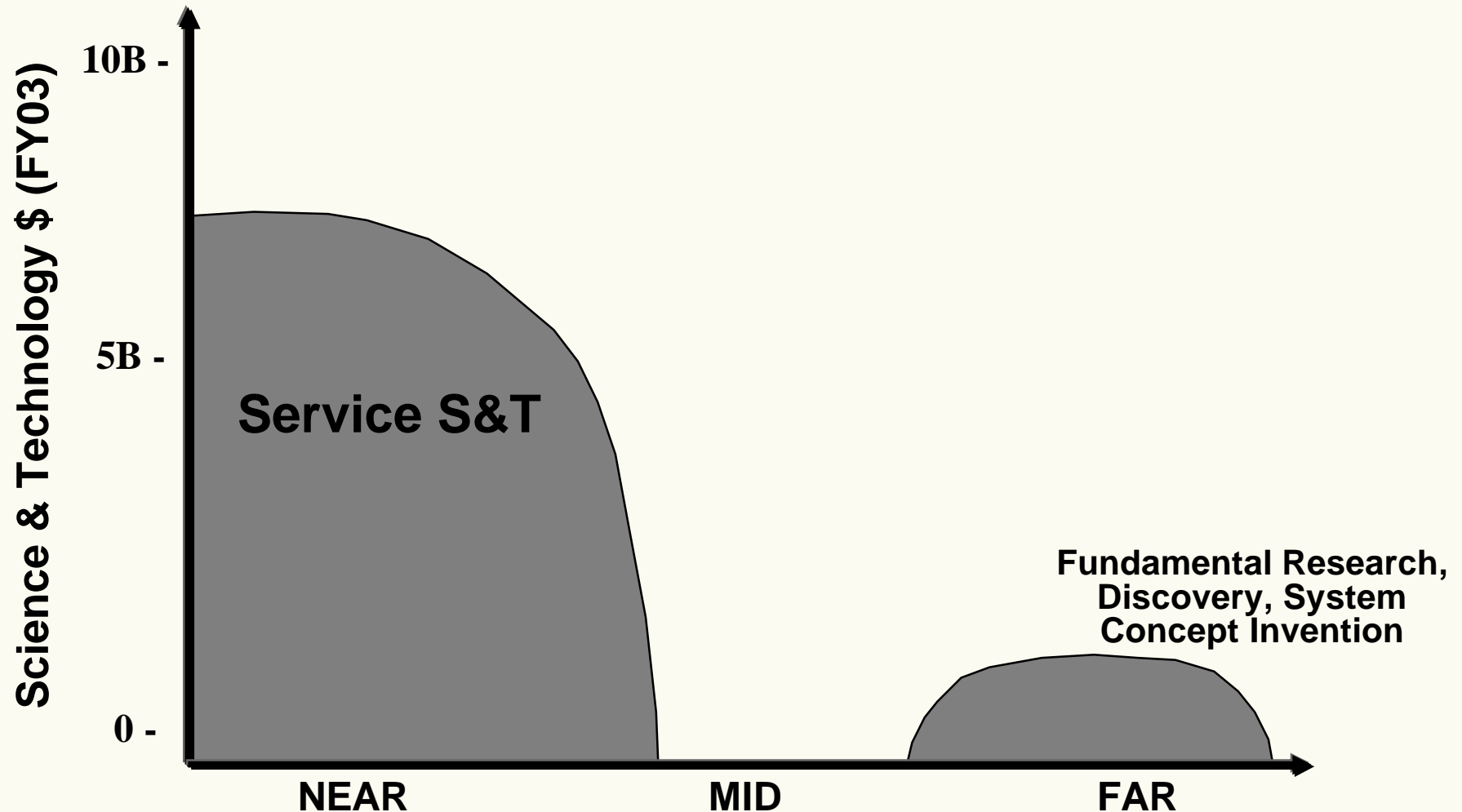
Cognitive Systems
Computational - Perception
Representation & Reasoning
Learning
Natural Communication

Microsystems Technology

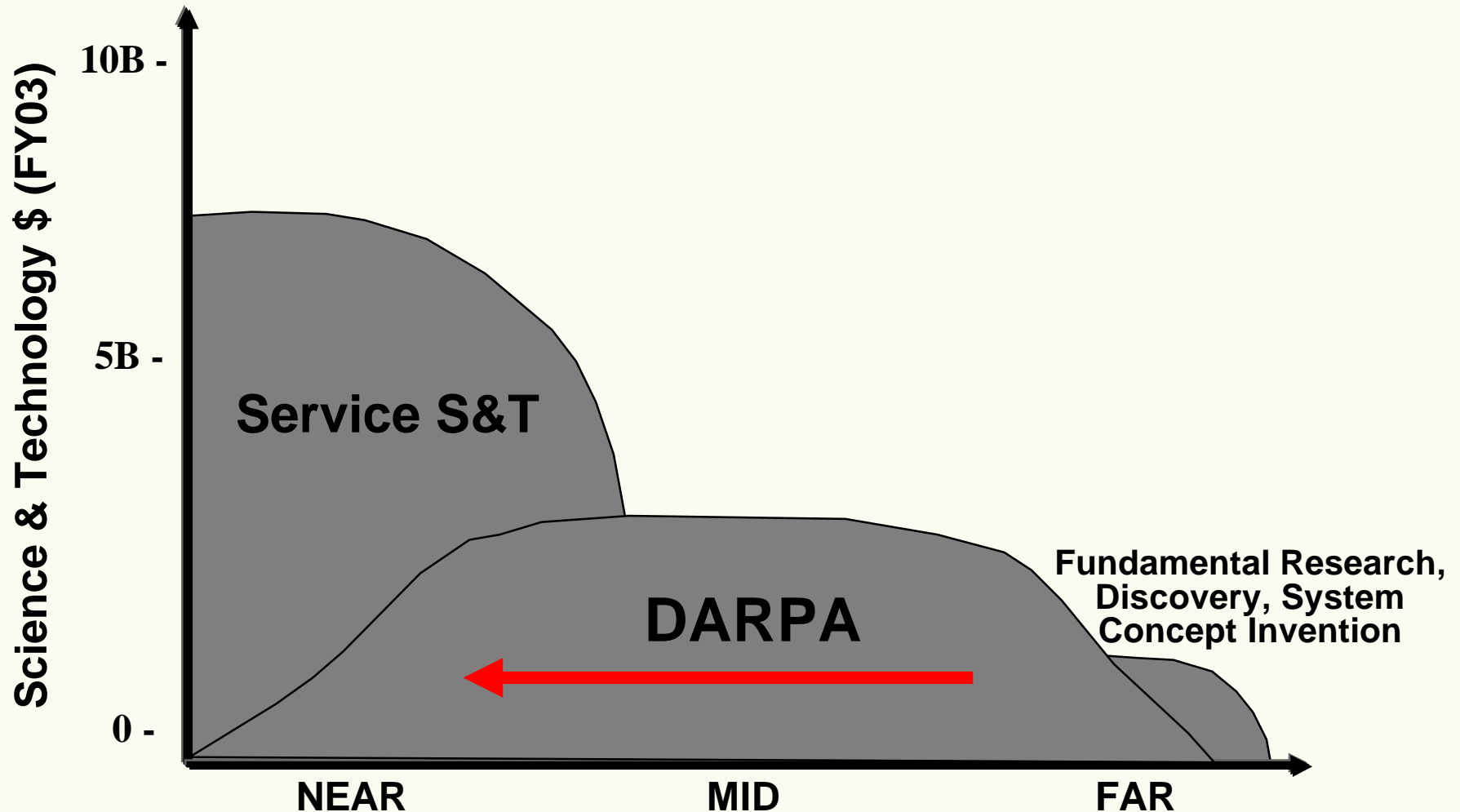
Robert Leheny
John Zolper

Electronics
Optoelectronics
MEMS
Combined Microsystems

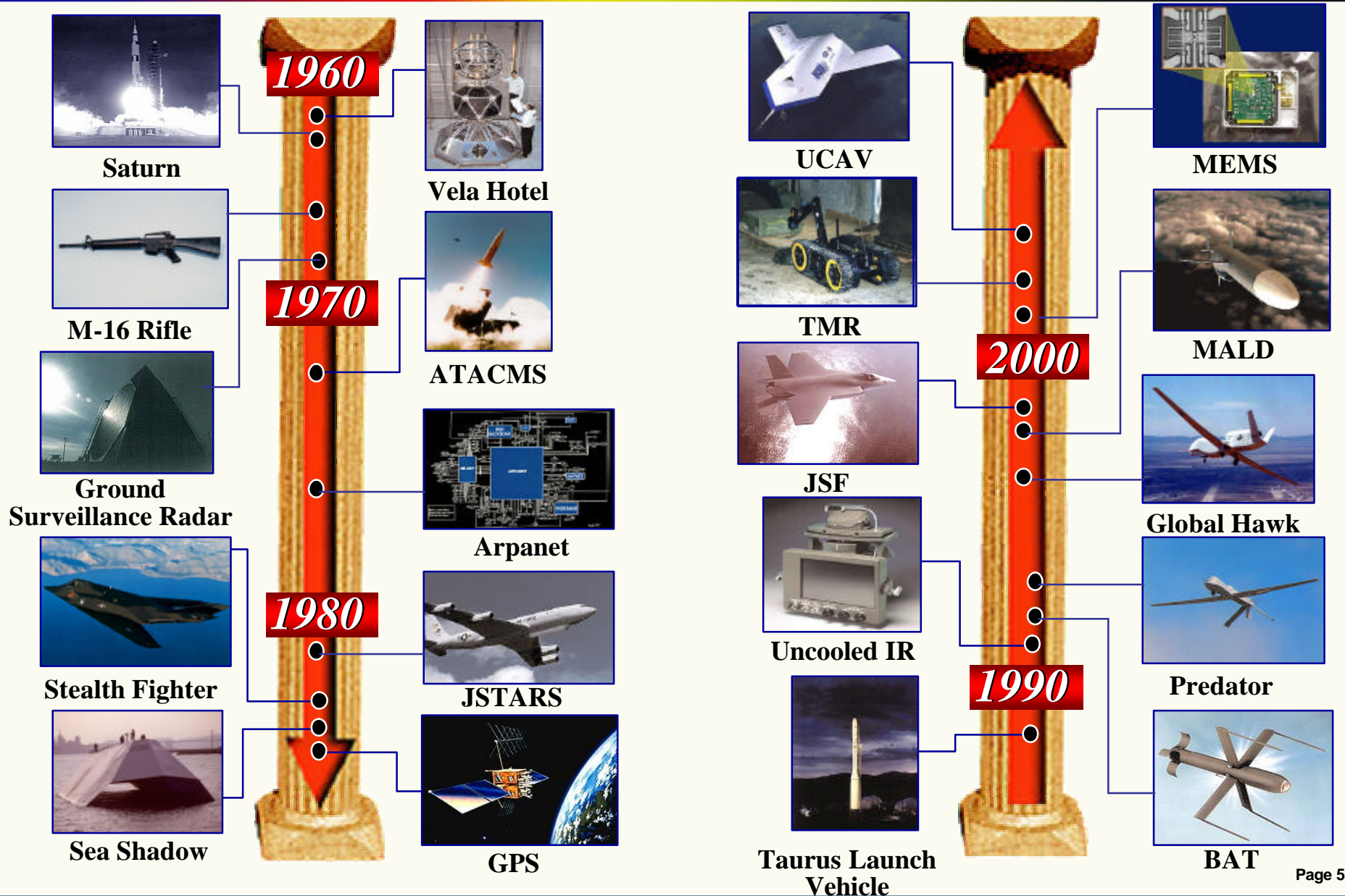
DARPA Role in Science & Technology



DARPA Role in Science & Technology



DARPA Accomplishments



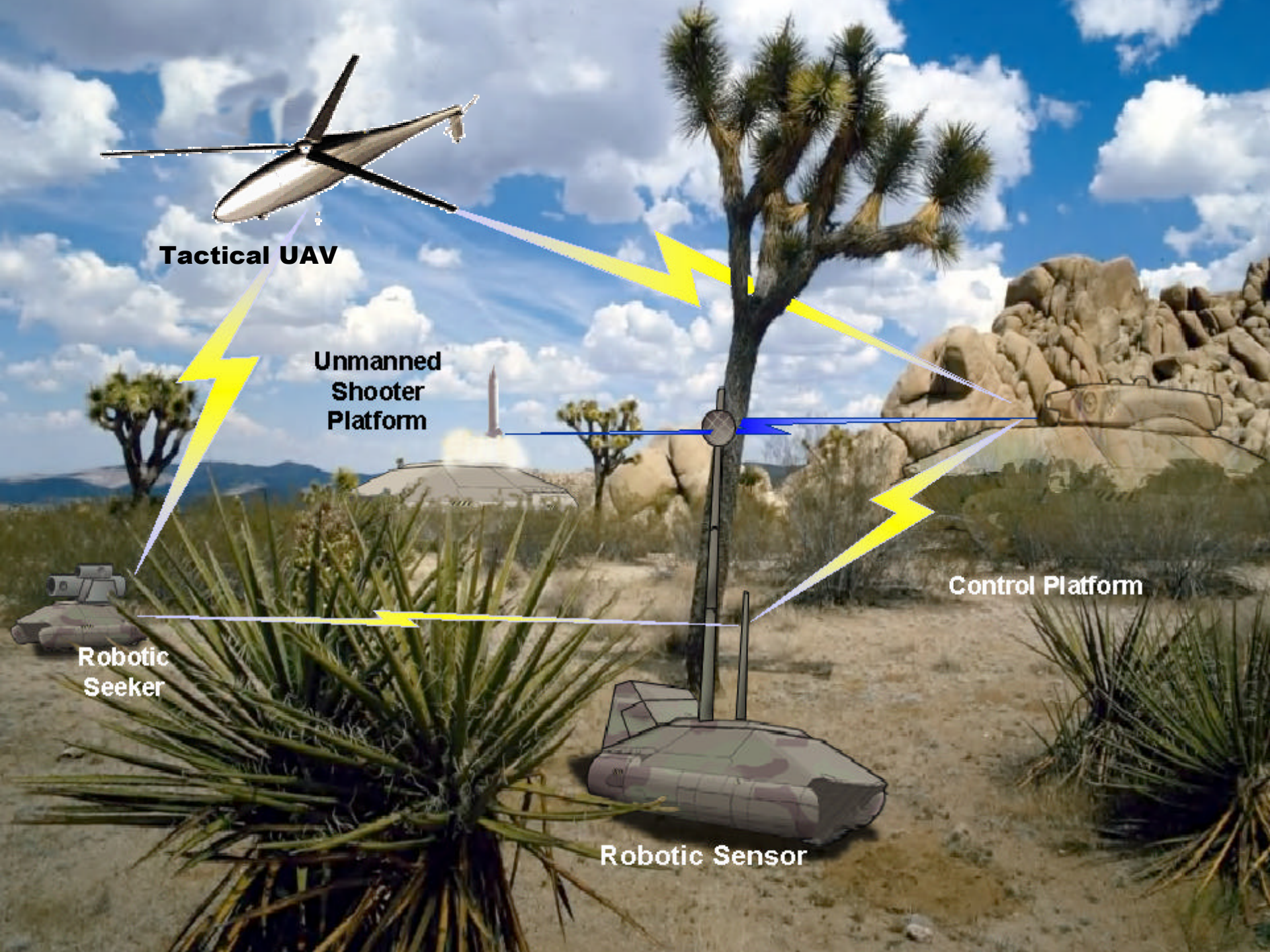
Investments Today for Future Capabilities



- Detect and Defeat Terrorist Networks
 - ✓ – Detection, Precision ID, Tracking, and Destruction of Elusive Surface Targets
 - ✓ – Characterization of Underground Structures
 - ✓ – Robust, Secure Self-Forming Tactical Networks
 - ✓ – Networked Manned & Unmanned Systems
 - ✓ – Cognitive Systems
 - Assured Use of Space
 - ✓ – Bio Revolution
- ✓ Technology synergy
With Grand Challenge

Networked Manned & Unmanned Systems Increasing Challenge of Autonomy





Tactical UAV

**Unmanned
Shooter
Platform**

**Robotic
Seeker**

Control Platform

Robotic Sensor

The DARPA Grand Challenge



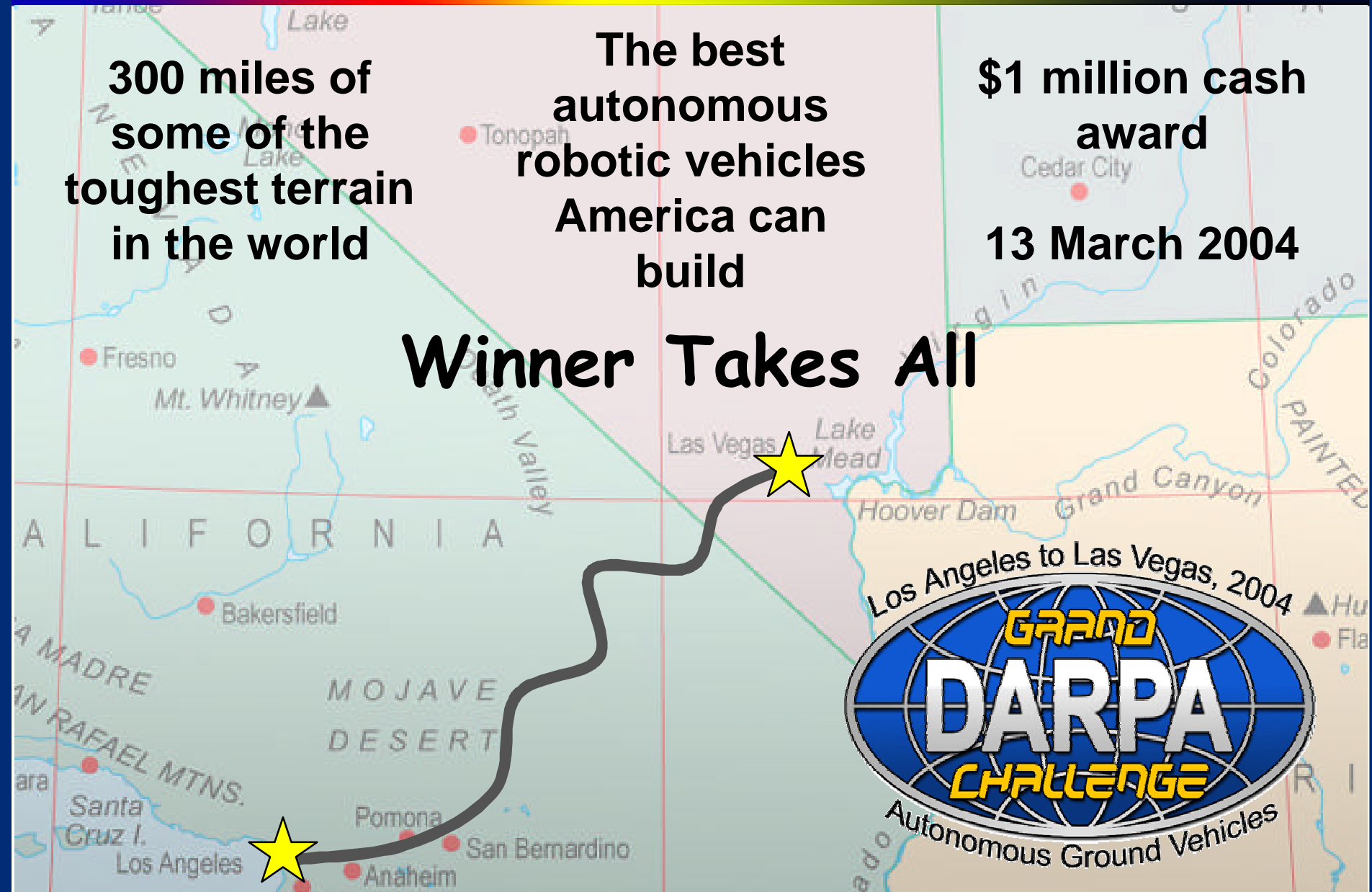
**300 miles of
some of the
toughest terrain
in the world**

**The best
autonomous
robotic vehicles
America can
build**

**\$1 million cash
award**

13 March 2004

Winner Takes All



Opportunity



- DoD Science & Technology Funds Increasing
 - Goal: 3% Reinvestment of DoD Top Line (\approx \$11B)
 - DARPA SBIR Program
 - Feasibility Study (\$100K), Prototype (\$750K), Production(\$\$\$)
 - FY03 Budget: \$61M
- DARPA Always Interested in Good Ideas
 - Talk to DARPA Program Managers
 - Join DARPA as a Program Manager
- DARPA Tech
 - March 9-12, 2004
 - Anaheim, CA

